DIACHÆA CYLINDRICA, A NEW SPECIES OF MYCETOZOA.

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Sporangia: cylindrical with obtuse apex, sessile, gregareous, iridescent, steel gray or bronze, 1 to 1.7 mm. high, .5 to .65 mm. thick. Hypothallus: whitish, rugose. Sporangium wall: membranous, hyaline, not adhering to the capillitium. Columella: arising from the hypothallus and extending nearly to the apex, brown, very light and semitranslucent near the base, irregular, flexuous, limeless throughout. Capillitium: brown, radiating from the columella to the periphery, repeatedly branching and anastomosing. Spores: 10 to 12 microns diameter, warted, the warts connected by ridges forming a more or less perfect coarse reticulation.

If the published descriptions of the genera of the Mycetozoa are taken verbally, this species cannot be classed with any one of those heretofore described. Its proper location is between Diachaa, Lamproderma and Comatricha. It differs from the first by the total absence of lime in its columella: from the second by the cylindrical form of the sporangia and the fact that the capillitium does not radiate from the end of the columella as a centre; and from the third by the persistent, iridescent wall, the absence of a stipe and the irregular columella. In external appearance as well as in the character of its capillitium it agrees with Diachaa, from which it differs, as before stated, only by the absence of lime. It was found near Wissahickon creek, not far from Indian Rock, Philadelphia.